

AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims:

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with

1 (currently amended). An apparatus for driving an imaging device, comprising:
an accumulating period calculating processor that obtains an accumulating period of [[an]] said imaging device, which has a light receiving element provided with first and second electrodes; and

a voltage control processor that controls voltage levels of said first and second electrodes during said accumulating period;

said voltage control processor fixing a voltage level of said first electrode and periodically changing a voltage level of said second electrode, in accordance with a length of said accumulating period, so that a charge pumping operation is performed, wherein said voltage control processor shortens a period by which said voltage level of said second electrode is periodically changed as said accumulating period increases.

2 (currently amended). The apparatus of ~~according to~~ claim 1, wherein said

imaging device ~~[[is of]]~~ comprises a full frame transfer type, in which ~~[[a]]~~ said light receiving element and a vertical transfer passage are common.

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3 (currently amended). The apparatus of ~~according to~~ claim 2, wherein said first electrode and said second electrode accumulate ~~electrodes are provided for accumulating~~ an electric charge in said light receiving element and transfer ~~transferring~~ said electric charge through said vertical transfer passage.

4 (currently amended). The apparatus of ~~according to~~ claim 1, wherein said voltage control processor fixes the voltage level of said first electrode at a first value, and periodically changes the voltage level of said second electrode between said first value and a second value, in accordance with said length of said accumulating period.

5 (currently amended). The apparatus of ~~according to~~ claim 1, wherein said voltage control processor performs said charge pumping operation when said accumulating period is longer than a standard period.

6 (currently amended). The apparatus of ~~according to~~ claim 5, further comprising a temperature sensor that senses a temperature around said imaging device, said voltage control processor changing ~~changes~~ said standard period in accordance with said sensed

temperature.

7 (canceled).

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8 (currently amended). The apparatus ~~of according to~~ claim 6, further comprising a temperature sensor that senses a temperature around said imaging device, said voltage control processor changing ~~changes~~ a period, by which ~~the~~ said voltage level of said second electrode is periodically changed, in accordance with said sensed temperature.

9 (currently amended). An apparatus for driving an imaging device of a full frame transfer type, in which a light receiving element and a vertical transfer passage are common, said apparatus comprising:

an accumulating period calculating processor that obtains an accumulating period of said imaging device, said light receiving element being provided with first and second electrodes, an electric charge being accumulated in said light receiving element for said accumulating period in accordance with a voltage applied to each of said first and second electrodes; and

a voltage control processor that controls voltage levels of said first and second electrodes during said accumulating period, in accordance with a length of said accumulating period, so that a charge pumping operation is performed, wherein said voltage control

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processor shortens a period by which said voltage level of said second electrode is periodically changed as said accumulating period increases.

10 (new). An apparatus for driving an imaging device, comprising:

an accumulator that accumulates a period of said imaging device having a light receiving element with a first electrode and a second electrode; and

a voltage controller that controls a voltage level of said first electrode and said second electrode during said accumulating period, wherein said accumulating period is inversely related to a period of a charge pumping operation.

11 (new). The apparatus of claim 10, wherein said voltage controller performs said charge pumping operation when said accumulating period is longer than a standard period.

12 (new). The apparatus of claim 11, further comprising a temperature sensor that senses a temperature around said imaging device, said voltage controller changing said standard period in accordance with said sensed temperature.
